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**MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY  
AND  
MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION**

**JOINT REQUEST FOR APPLICATIONS**

**FOR**

**PRIMARY WOOD PRODUCTS  
AND  
LUMBER MANUFACTURING FACILITY  
ENERGY EFFICIENCY AUDITS**

**DEQ Request For Applications #11\_002**

Release Date:  
December 23, 2010

**Important Dates**

Release of RFA	December 23, 2010
Applications received by deadline	January 24, 2011
Evaluation Process Completed by	January 31, 2011
Final Selections	February 07, 2011
Sign Contracts and begin project	February, 2011
Reporting Begins	After Contract Execution
Projects Completed	March thru May 30, 2011

## I. OVERVIEW

The Montana Departments of Environmental Quality and Natural Resources and Conservation (DEQ and DNRC) are issuing a joint Request for Applications (RFA) for funding assistance to invest in industrial energy efficiency audits at primary wood products and lumber manufacturing facilities (hereafter referred to as “Facilities”). A portion of this project is being funded by a grant for the United States Department of Energy under the American Recovery and Reinvestment Act of 2009.

The forest products industry uses energy in processes including facility operations, debarking, drying, process heating, fabrication, and finishing. There are opportunities throughout these processes to integrate energy efficiency, waste-heat recovery, combined heat and power and/or biomass-generated heat and/or electricity production. A strong focus of this funding program is to assist wood products and lumber manufacturing facilities that currently use woody biomass for energy, and/or are planning the integration or expanded use of biomass energy for thermal, mechanical or electrical power production for use on-site or for export. However, non-biomass energy users are eligible to apply.

Facilities selected for this grant program will receive a energy efficiency audit of their site. The energy efficiency audit will be conducted by a consultant pre-qualified by DEQ to provide this type of audit. Consultants will be matched to facilities to get the best value for the audit investment, using a competitive process. DEQ will work with the selected facility and consultant to develop a scope of work specific to the facility. The audits will evaluate current systems and processes, analyze baseline energy usage, and recommend cost effective measures to improve efficiencies in steam, process heating, pumping, compressed air, fan, lighting, waste heat recovery, and combined heat and power (CHP) systems. Attachment A to this RFA details the minimum scope of work to be conducted by the energy efficiency auditing firm.

DEQ and DNRC recognize that energy consumption per unit of product produced and other data collected during these audits may be of strategic importance to private industry. DEQ will compile and report potential saving results of cost effective measures for all audits conducted and will maintain the confidentiality of information to the extent allowed by law. Please see Section XI of this RFA for more details.

The main focus of the audits is to assist successful applicants to create and implement strategies to:

- Improve energy efficiency in the wood products and power generation sectors;
- Reduce the total energy use and waste heat generation of the facility;
- Increase the use of combined heat and power;
- Increase use of waste wood and otherwise non merchantable biomass for thermal and mechanical energy production;
- Enable the facility to become eligible for funding of efficiency measures through their utility programs and other programs like those from USDA; and

- Reduce fossil fuel consumption in an environmentally sustainable manner that maximizes benefits for local and regional communities;

## II. PURPOSE

The purpose of this RFA is to develop a ranked list of primary wood products and lumber manufacturing facilities in Montana, such as sawmills and composite board producers who will then be selected to receive funding assistance for energy efficiency audits. A strong focus of this funding program is to assist wood products and lumber manufacturing facilities that currently use woody biomass for energy, and/or are planning the integration or expanded use of biomass energy for thermal, mechanical or electric power production for use on-site or for export. Facilities with these characteristics will be ranked higher in the selection process.

DEQ and DNRC intend to invest a maximum total of \$150,000 in energy efficiency audits for these facilities.

## III. SINGLE POINT OF CONTACT

After **December 23, 2010** and until such time as the awarded projects are announced, applicants are not allowed to communicate with any state staff or officials regarding this RFA, except at the direction of Vicki Woodrow, the Procurement Officer for the RFA. Any unauthorized contact may disqualify the applicant from further consideration. Contact information for the single point of contact is as follows:

Ms. Vicki Woodrow, Contract Officer  
Department of Environmental Quality  
Phone: 406-444-3101  
E-mail: [vwoodrow@mt.gov](mailto:vwoodrow@mt.gov)

## IV. SCHEDULE OF EVENTS AND TERM

All applications must be delivered to DEQ by January 24, 2011. The applications will initially be reviewed for completeness. Complete applications will be forwarded to a review team composed of members from DEQ and DNRC. The review team will evaluate and rank the applications and recommend the highest ranked for funding. The review team may contact applicants for clarifications of terms and items of concern in their application.

### Significant Dates:

- Release of Announcement and RFA .....December 23, 2010
- Deadline for Applicant Questions ..... January 03, 2011
- Deadline for DEQ to Post Answers..... January 07, 2011
- Deadline for Submittal of Grant Applications ..... January 24, 2011
- Applications Reviewed for Completeness ..... January 27, 2011

- Completed Applications Forwarded to Review Team ..... January 27, 2011
- Evaluation Process.....January 27 thru February 07, 2011
- Final Selections .....February 07, 2011
- Sign Contracts and Begin Project.....February 2011
- Expenditure of Funding Complete by ..... March thru May 30, 2011
- Reporting.....Begins upon Contract Execution

## **V. ELIGIBILITY REQUIREMENTS**

- Applicants must be a primary wood products and lumber manufacturing facility in Montana. Such facilities could include, but are not limited to, sawmills; plywood, medium density fiberboard or particle board production facilities, co-generation facilities or primary wood-handling production facilities.
- Private and non-profit entities licensed to conduct business in the state of Montana are eligible.
- Corporate entities may submit multiple applications, but each application can cover only one Montana facility site. "Facility site" is defined as a single geographic location. The maximum amount of funding per facility or corporate entity application is \$50,000.
- Applicants must formally apply to this RFA, providing all requested forms and attachments.
- The application must be signed in ink by an individual authorized to legally enter into contracts for the facility. The letter of commitment for matching funds must also be signed in ink by an individual authorized to legally enter into contracts for the fund provider and that individual may be different from the one authorized to sign for the energy efficiency audit. Proof of authority for the person signing the application or letter of financial commitment must be furnished upon request. Applications may not be modified, withdrawn or canceled during the 180-day period following the application submission deadline.

## **VI. EVALUATION PROCESS**

- The application review team will evaluate all complete applications and rank according to the evaluation criteria described in detail in Attachment D. The team will follow state procurement policies and procedures. The review team will use information supplied in the applications, and may formally request additional information through the state's procurement procedures.
- The evaluation team members will review and score applications individually, then meet in a public venue to rank the applications by consensus. The applicants will be notified of their ranked position according to the schedule posted in section IV.

## **VII. RANKING**

Please see Attachment D – Evaluation Criteria for scoring details. Applications will be ranked on:

- Completeness of the application;

- Statement of Need
- Facility Description
- Technical Feasibility
  - The Energy Efficiency Audit
  - Integration of Biomass Energy, Combined Heat and Power and/or Waste Heat Recovery Systems
- Employment Created or Maintained
- Matching Funds and/or In-Kind Contribution

## **VIII. PROCEDURES FOR THE AUDIT AWARD**

DEQ will conduct as many audits as funds will allow. DEQ shall enter into a contract with a pre-qualified consultant for each facility to be audited. These contracts shall cover a maximum of 90% of the cost each audit. The remaining 10% shall be covered by the facility and requires the facility to provide the consultant with a letter of commitment ensuring payment of that 10%. Please note that facilities may, at their discretion, provide more than the 10% minimum match required for the audit. Any increase in the facility match reduces the audit funds provided by the DEQ. In an effort to fund as many audits at qualified facilities as possible, additional match provided by the facility will receive additional points in the evaluation process. The agreement between the facility and consultant for payment of the facility's share of the audit costs shall be separate and DEQ and DNRC shall have no obligation under that agreement.

Successful applicants will be notified after February 07, 2011. If additional funds are made available or negotiations fail with top-ranked applications, additional notifications will be made as they arise.

## **IX. AUDIT AND RESULTS**

DEQ will work with each successful applicant to develop a schedule and scope of work specifically for the facility, contracting directly with a consultant selected through a competitive process to provide the energy efficiency audit. The consultant will provide at minimum the services outlined in Attachment A: Scope of Work.

Following is the basic process each facility will following with regard to the audit and the results of the audit:

- The consultant will coordinate site visits and data collection with the facility contact person indicated in the application.
- The facility will provide the consultant with operation data, prior energy audits, and a minimum of two years energy information.
- The consultant will submit the draft Energy Efficiency Audit (EEA) Report to DEQ and to the facility contact for review. The draft report will be reviewed by a DEQ appointed engineering specialist and other state staff, as well as staff from the

facility. DEQ will incorporate the comments, concerns and necessary changes from staff and the facility into a single response and return the response to the consultant for revisions and a final EEA Report. If the draft report contains details that are confidential to the facility, the facility must mark confidential data as such. The facility will receive the final report inclusive of all information to ensure its ability to proceed with implementation of the recommended measures. DEQ will remove confidential information from the file copy of the final report.

- Upon completion, the consultant shall submit the final EEA Report to the facility contact for presentation to their management or board for consideration and possible action. The facility contact will report to DEQ in writing the facility's proposed response, identifying what actions were prioritized from the energy efficiency measures presented.
- Upon completion of the final EEA report the Consultant shall send the final EEA report to DEQ along with its invoice for DEQ's share of the audit costs. The facility shall receive its copy of the final EEA report upon full payment to the Consultant for its share of the audit costs.
- The facility will respond to follow-up requests from DEQ for information about measures installed as a result of the audit and recommendations.
- DEQ will publish general information that pertains to this and other facility audits as part of a summary report of this energy audit program. The report will summarize the characteristics of all the facilities audited, the measures recommended and the potential for energy savings. No proprietary information specific to any facility shall be included in this report or made public at any time.

## **X. APPLICATION MATERIALS AND INSTRUCTIONS**

**One original, four copies, and a thumb drive or CD** of the application materials must be received at **DEQ offices by 3:00 pm January 24, 2011**. Facsimile and emailed (.pdf) copies will not be accepted. A complete submittal must include the following:

- A. Completed and signed Application Form (Attachment C).
- B. Evaluation Criteria not to exceed 10 pages, in the format specified in Attachment D.
- C. Signed Letter of Commitment for match/cost share
- D. Completed Attachment B, Facility Energy and Fuel Consumption Summary Form
- E. Title page(s) from any previous energy audits, feasibility studies, or facility improvement plans being submitted for point consideration in Attachment D.

Completed applications must be submitted to DEQ as follows:

**Hand Delivery:**

Ms. Vicki Woodrow  
Department of Environmental Quality  
Financial Services, Room 3  
1520 E. Sixth Avenue  
Helena, MT 59620

**Mail Delivery:**

Ms. Vicki Woodrow  
Department of Environmental Quality  
Financial Services, Room 3  
PO Box 200901  
Helena, MT 59620-0901

**XI. General Guidelines**

**A. Important Notes**

- ☐ The maximum amount of funding per facility application or corporate entity is \$50,000.
- ☐ No audit will be conducted without a fully executed contract between DEQ and the auditing firm, and a signed Letter of Commitment to DEQ from the facility.
- ☐ In accordance with guidance from the U.S. Office of Management and Budget the facility will be required to display the Recovery Act Logo to inform the public that the project is being funded through the Recovery and Reinvestment Act of 2009. DEQ will provide the appropriate signage and instructions to each facility funded. The Recovery Act Horizontal Logo mark will be used for any press releases or other online or offline communications and can be found on the following site - [http://www.epa.gov/ogd/forms/Recovery\\_emblem\\_guide\\_v1%5B1%5D.pdf](http://www.epa.gov/ogd/forms/Recovery_emblem_guide_v1%5B1%5D.pdf)
- ☐ Energy audits must be completed May 31, 2011, a draft final report submitted to DEQ by June 30, 2011, and the final report received by September 16, 2011.
- ☐ The following language addresses the issue of public information in the state procurement process:

**Public Information.** All information received in response to this RFA, including copyrighted material, is deemed public information and will be made available for public viewing and copying shortly after the time for receipt of applications has passed with the following three exceptions: (1) bona fide trade secrets meeting the requirements of the Uniform Trade Secrets Act, Title 30, chapter 14, part 4, MCA, that have been properly marked, separated, and documented; (2) matters involving individual safety as determined by the State; and (3) other constitutional protections. See section 18-4-304, MCA. The State will make a copier available for interested parties to use at \$0.10 per page. The interested party is responsible for the cost of copies and to provide personnel to do the copying.

**Procurement Officer Review of Applications.** Upon opening the applications received in response to this RFA, the procurement officer will review the applications and separate out any information that meets the referenced exceptions in Section 2.2.1 above, providing the following conditions have been met:

- Confidential information is clearly marked and separated from the rest of the application.
- The application does not contain confidential material in the cost or price section.
- An affidavit from an offeror's legal counsel attesting to and explaining the validity of the trade secret claim as set out in Title 30, chapter 14, part 4, MCA, is attached to each application containing trade secrets. Counsel must use the State of Montana "Affidavit for Trade Secret Confidentiality" form in requesting the trade secret claim. This affidavit form is available on the OneStop Vendor Information website at:  
<http://gsd.mt.gov/ProcurementServices/rfpprocess.mcpX> or by calling (406) 444-2575.

Information separated out under this process will be only be available for review by the procurement officer, the evaluator/evaluation committee members, and limited other designees. Applicants must be prepared to pay all legal costs and fees associated with defending a claim for confidentiality in the event of a "right to know" (open records) request from another party.

## **B. Applicant Checklist**

- ☐ A checklist of items required in the application is provided for Applicants in Attachment G to this RFA.

## **C. Grant Application General Instructions**

- ☐ Release of Announcement and Request for Applications

The RFA announcement is being released on December 22, 2010. This announces the amount of funding available per applicant, application due date, anticipated date the contracts will be awarded, and other pertinent information specific to the grant cycle.

The RFA Packet will be available on the following websites:

<http://deq.mt.gov/Recovery/energy/energy.mcpX>

<http://svc.mt.gov/gsd/OneStop/SolicitationDefault.aspx>

<http://dnrc.mt.gov/forestry/Assistance/Biomass/default.asp>



To request a copy of this application, please contact:

Vicki Woodrow  
Telephone Number: 406-444-3101  
E-mail Address: [vwoodrow@mt.gov](mailto:vwoodrow@mt.gov)

☐ Question and Answer Period

DEQ will accept written questions only through 5:00 p.m. local time on January 03, 2011. Questions must be submitted in writing via email to [vwoodrow@mt.gov](mailto:vwoodrow@mt.gov). DEQ's answers to submitted questions will be posted by close of business January 07, 2011 on the above noted websites.

All questions regarding the grant application must be made in writing via email to Procurement Officer Vicki Woodrow **ONLY**.

#### **D. Application Requirements**

The following is required for all application packets:

- ☐ Use recycled-content paper for all printed documents.
- ☐ Do not use binders or folders. The application packet should be stapled only.
- ☐ Additional information such as letters of commitment and support should be on standard 8.5x11-inch paper.
- ☐ Application Packets must be submitted in the order and format outlined in the checklist provided in Attachment G.
- ☐ Application Packets must be received by 3 p.m. January 24, 2011.
- ☐ Mail or hand deliver the original Application Packet, four (4) copies and the CD or thumb drive in a sealed packet to Vicki Woodrow at the address or location provided above.

#### **E. Structure of Application**

Structure the application in the format outlined in Attachment G. This information will be used by the review team during the evaluation process. Verify that the information provided clearly describes the project. The evaluation will be guided by the information that is provided.

#### **F. List of Attachments:**

Attachment A. Minimum Scope of Work for Energy Efficiency Audit Consultants  
Attachment B. Facility Energy and Fuel Consumption Summary Form  
Attachment C. Application Form and Instructions  
Attachment D. Evaluation Criteria  
Attachment E. Sample Utility Release Form  
Attachment F. Sample Letter of Commitment  
Attachment G. Application Submittal Checklist

## ATTACHMENT A

### MINIMUM SCOPE OF WORK FOR ENERGY EFFICIENCY AUDIT CONSULTANTS

A typical energy efficiency audit scope of work includes, at a minimum, the following:

**1. Information Page:** Completion of an information page with the following data placed at the beginning of the report:

- 1.1. Facility name, address, and GIS coordinates if known
- 1.2. Facility owner name, title, address, phone number, fax number & e-mail address
- 1.3. Facility on-site contact name, title, address, phone number, fax number & e-mail address
- 1.4. Name of energy analyst preparing the report, title, company, address, phone number, fax number, e-mail address and tax identification number with classification (sole proprietor, partnership, corporation, non-profit, or governmental entity)
- 1.5. Facility electric and natural gas utility account numbers and meter tariffs and name of current energy provider
- 1.6. Facility identification number and classification, industry name, and Division headquarters.

**2. Facility Description:** A complete description of the facility including:

- 2.1. Facility history with the year and description of each remodel in the most recent 10-year period.
- 2.2. Each process or building's function, usage pattern and average number of occupants for each time period.
- 2.3. Structural characteristics and thermal characteristics of buildings and processes with table of published "U" values for building shell components (walls, windows, doors, perimeter, etc.) from accepted values.
- 2.4. Mechanical systems including all HVAC systems, DHW systems, pumps, motors, conveyors, and controls
- 2.5. Table showing representative outside air (cfm/ft<sup>2</sup> or cfm/person) being delivered to each space in the facility, or at a minimum, the outside air damper position and calculation of air being delivered by the fan with spot checks of outside air delivered at the end of the duct runs.
- 2.6. Electrical systems including interior and exterior lighting, fans, blowers, pumps, panel loads calculated as a percentage of the total, (or similar analysis for lighting, process equipment), electric motors over 5 horsepower, and any miscellaneous systems.

2.7. Typical lighting information to include both measured and required lumen levels in specific task areas, as identified by the facility manager or other applicable standard.

2.8. Inventory of energy consuming components/equipment. Information should include model number, age, specifications, size, nominal energy consumption, and nameplate data.

2.9. A floor plan of the facility and individual buildings. A site plan for irrigation, exterior lighting or similar may be included to provide supplemental detail.

**3. Energy Usage Analysis:** Energy usage will be analyzed for a minimum of the two previous calendar years including current year. The energy usage analysis will contain the following information:

3.1. Utility and Fuel Purchase Records. Records of all energy purchases will be presented. Records should include the amount, date, and price of the energy purchase. Applicable utility rate schedules and other fuel cost documentation will be included. (If necessary, the analyst will be responsible for obtaining the facility owner or manager's signature on a confidentiality release)

3.2. Energy Use Index (in Btu/sf and/or Btu/unit production). The Energy Use Index for the facility will be calculated and compared to similar facilities in the region.

3.3. Energy cost analysis. The total energy cost for all fuels used at the facility will be calculated, as well as a \$/SF-yr, a \$/unit product-yr figure, or both. Heating and cooling degree-days will be presented for the years analyzed, as well as a long-term average for both heating and cooling degree-days.

3.4. Energy Cost by Major Subsystem. Quantify the approximate energy costs for the major subsystems in the facility. Rough estimates of subsystem energy costs can be based on a simple base usage analysis, and can be expressed as a percentage of the total cost. Examples of these subsystems include HVAC, lighting, DHW, plug load, natural gas and process equipment. All calculations used in this analysis will be included, and all assumptions will be clearly identified. Individual areas of high-energy usage will be identified and evaluated in the report.

**4. Operations and Maintenance Assessment:** A brief overview of the effectiveness of the building systems maintenance program will be presented, and operation and/or comfort problems will be noted. Mechanical and control systems will be evaluated to discern whether or not they are operating in accordance with the original design intent. This evaluation is accomplished through review of any applicable drawings and random spot measurements of mechanical systems and controls operation. Any actual measurements made on-site will be presented to support the evaluation made above. The estimated remaining useful life for components of major building systems will be estimated, based on ASHRAE tables and the best judgment of the evaluator, and noted in the report. A table will be presented which contains any component with a remaining life of less than five (5) years, as well as the estimated remaining useful life of the component.

**5. Energy Use Model:** The methodology or description of the estimating tool for determining savings will be explained. Unless otherwise directed by DEQ, an hourly

computer simulation model of the facility energy use will be used by the Contractor to model the base case of the existing facilities energy use, and to model each proposed Energy Efficiency Measure (EEM), and one or more groupings of EEM's. The software program performing a building energy use simulation or for steam, process heating, compressed air, motors, pumps, fans and other energy using systems will be described and a short description and state key input data will be included. All assumptions and inputs used will be explained and all input files and key output files with documentation that explains how the final savings figures are derived from the simulation program output will be provided as printouts. If manual calculations are employed in addition to the computer model, the reports will identify formulas, assumptions and key data.

**6. Savings Opportunities:** Individual energy efficiency measures (EEM's) will be presented in this section. An EEM can be any opportunity the analyst identifies to improve the energy efficiency of the building or processes of the facility. There are, however, two cases in which specific EEM's must be addressed. They are:

6.1. If the mechanical systems are found not to be operating at design specifications, the cost and effect on energy costs will be estimated to "commission" the system, or bring it back to the original design intention. Any subsequent EEM's dealing with the system will be evaluated with the system operating in its "commissioned" state.

6.2. Pieces of equipment or subsystem with an estimated remaining useful life of less than five years, as identified by the Facility Manager, will be evaluated in terms of replacement with a more energy efficient unit or system.

6.2.1. Each individual EEM will have a description covering the scope of work, the estimated implementation costs, and the estimated energy cost effects with a breakdown by month of the type and quantity of energy savings. Simple payback will be calculated for each EEM in years. A life cycle cost analysis will be presented for the EEM, with the period of study being the estimated useful life of the equipment involved (as defined by ASHRAE tables). All necessary fuel escalation rates, discount, and inflation rates will be identified by DEQ in the contract statement of work. All calculations will be included in the EEM description and all assumptions will be clearly stated.

6.2.2. Deliverables will be specific to each agreement/facility, and the assessment shall include but not be limited to:

6.2.2.1. Measure Baseline Description.

- 1) Nameplate data.
- 2) Baseline energy/fuel consumption

6.2.2.2. Facility Energy Efficiency Savings Estimates.

- 1) Estimated incremental energy savings (kWh/yr, mmBtu/yr).
- 2) Estimated project cost (\$)

- 3) Estimated O&M Costs (- (savings) or + (increases) \$/year)
- 4) Customer Retail Rate (\$/kWh, \$/mmBtu)
- 5) Estimated utility incentive, if available. Measurement and Verification Plan
- 6) Propose plan for measurement and verification of energy savings.
- 7) Justify assumptions made to measure energy consumption (as described in (BPA master terms, Section B.4.1.c.i.)
- 8) Establish baseline energy consumption (as described in BPA master terms, Section B.4.1.c.i.)
- 9) The Contractor shall collect baseline system data for a minimum of 14 days
- 10) For evaluation of combined heat and power generation for internal use or external sale, an analysis would be conducted that includes all the taxes, grants, low interest loans, cost of utility power (for internal use) or power purchase agreement price, value of renewable energy credits sold to California or similar market (no power moved). This may include the use of a model like RelCost Financial <http://www.northwestcleanenergy.org/SoftwareTools.aspx> because of the flexibility of the tools for all the incentives and financial arrangements
- 11) A proposal, including estimated cost, to conduct the post implementation Measurement and Verification defined in Section B.4.1.c.i.

### 6.3. Energy Efficiency Measure Summary Table.

6.3.1. The Contractor shall include a summary table of energy efficiency measures. Appendix D provides a template for the energy efficiency measure summary table and Appendix E provides an example of a completed table (Appendix D).

**7. Recommended Action Plan:** The analyst will recommend a course of action based on the findings of the energy studies and the needs of the facility and process systems. The plan of action must include, but is not limited to:

#### 7.1. Maintenance of systems

- 7.1.1. Implementation of O&M measures identified in the O&M Analysis, including retro-commissioning
- 7.1.2. Strategy for maintaining HVAC systems
- 7.1.3. Potential need to enter into a maintenance contract

- 7.1.4. Development and implementation of an in-house preventive maintenance program
  - 7.2. System improvements
    - 7.2.1. Prioritize implementation of identified energy efficiency measures (EEM's)
    - 7.2.2. Strategy for implementing improvements, including commissioning of EEM's
    - 7.2.3. Identify additional engineering analysis needed, including design and/or computer modeling
    - 7.2.4. Plan for use of waste heat in cascading processes or power production, or use of combined heat and power
  - 7.3. Identify potential sources of funding such as utility incentives, USDA programs, self directed funds, and facility maintenance funding.
  - 7.4. Identify energy management opportunities that would benefit the facility. Prepare a description of how the facility would implement the following practices:
    - 7.4.1. Utility bill analysis
    - 7.4.2. Sub-metering of buildings or systems
    - 7.4.3. Benchmarking comparison to other similar facilities such as prescribed for Energy Star ratings.
    - 7.4.4. Energy procurement, fuel/power contracts
  - 7.5. All recommended actions will be presented in a table, which will include the estimated implementation cost, if applicable.
8. The analyst will submit a report containing the information outlined above to DEQ and to the owners of the facility being studied. The report will be reviewed by a DEQ appointed engineering specialist. Reports that are reviewed and determined not to meet requirements will be allowed a reasonable time to submit necessary revisions. DEQ may schedule a meeting or conference call to discuss the report findings and recommendations. The final report will be reviewed and approved by DEQ or the appropriate agency before final payment is issued.

## ATTACHMENT B

### FACILITY ENERGY AND FUEL CONSUMPTION SUMMARY FORM

Please provide the following information about your facility regarding the energy consumed to produce your products. Your responses will be kept strictly confidential.

Facility Type (sawmill, plywood, MDF, particleboard, cogeneration facility, etc.)

- 
- 1) What types of energy sources are consumed annually to operate the **on-site components** of your facility (boilers, saws, planers, kilns and/or dryers, lights, computers, office, generators, etc.):

☐ Electricity from utility company per year.

Kilowatt-hours per year \_\_\_\_\_

Utility company \_\_\_\_\_

☐ Electricity from woody biomass on-site per year

Kilowatt-hours per year \_\_\_\_\_

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☐ Natural gas per year \_\_\_\_\_ by cubic feet or dekatherms per year  
(please circle unit of measure)

☐ Propane per year \_\_\_\_\_ Gallons or pounds per year (please circle unit of measure)

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☐ Wood for heat per year \_\_\_\_\_ by Tons or cords  
(please circle unit of measure)

☐ Other energy \_\_\_\_\_ Please describe energy type, amount and units

- 
- 2) Amount of all woody biomass used on site for fuel or energy (thermal, electrical, and steam/mechanical):

\_\_\_\_\_ tons of biomass, \_\_\_\_\_ percent moisture content

- 3) What types of fuel are consumed annually to operate all of your mill's **on-site support equipment** such as rolling stock (e.g. trucks, forklifts, log loaders, etc.):

☐ Diesel Gallons per year \_\_\_\_\_

☐ Gasoline Gallons per year \_\_\_\_\_

☐ Propane Gallons or pounds per year (please circle unit of measure)

---

☐ Other fuel \_\_\_\_\_ Please describe fuel type, amount and units

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## ATTACHMENT C - APPLICATION FORM AND INSTRUCTIONS

Energy Efficiency Audit Application Form	
Facility Name:	
Facility Location:	
<b>Facility Legal Contact Information</b> (as used in contracting) Name: Address: City: State: Zip Code:	<b>Mailing Contact Information</b> Name: Address: City: State: Zip Code:
<b>Facility's Contact Person Project Manager</b> (administrative and technical) Name: Address: City: State: Zip Code:	Title: Phone: E-mail:
Organization type, check one: <input type="checkbox"/> Local Government Entity <input type="checkbox"/> Non-profit Organization <input type="checkbox"/> Private Enterprise If Private Enterprise, check all that apply: <input type="checkbox"/> Small <input type="checkbox"/> Large <input type="checkbox"/> Woman-owned <input type="checkbox"/> Minority-owned If Minority Owned, check one: <input type="checkbox"/> African American <input type="checkbox"/> Asian <input type="checkbox"/> Hispanic <input type="checkbox"/> Native American <input type="checkbox"/> Other	
D-U-N-S® Number:	
Federal Identification Number:	
We agree to allow the DEQ consultant assigned to our audit access to our facility while it is operating for the purposes of evaluating, monitoring and/or sub-metering equipment and processes. We further agree to provide access to at least 2 years' utility and fuel data, and energy audit reports completed within the past five years. <input type="checkbox"/> yes <input type="checkbox"/> no	
<b>Are you or your organization currently debarred, suspended or otherwise lawfully prohibited from any public procurement activity?</b> <input type="checkbox"/> yes <input type="checkbox"/> no If the answer is "yes", the application will no longer be considered.	
The undersigned offers and agrees to perform in compliance with all terms, conditions, specifications and scope in this application. Authorized Signature  _____ Print Name, Title  _____ Company/Agency  _____ Date _____	
<b>This Request for Applications is advertised as a part of the American Recovery and Reinvestment Act of 2009, ARRA, commonly known as the Economic Stimulus Act. An award of funds under this project is automatically canceled if federal funds under ARRA, Public Law 111-5 are not appropriated or otherwise made available to support the contract's commencement or continuation of performance.</b>	



## Application Form Instructions

A separate application must be completed for each facility being proposed for an energy audit.

**Each page following the first page of the application form should include the name of the applicant, facility and the RFA number.**

**Facility Name:** Name of Primary wood products and lumber manufacturing Facility applying for the Energy Efficiency Audit

**Facility Location:** The address and description of the facility location.

**Facility Legal Contact Information:** The legal name and address of the facility that would appear in a contract or memorandum of understanding.

**Mailing Contact Information:** The mailing address of the facility to be audited, if different from the legal address.

**Facility Contacts** Please supply the following (They may be the same person for some applications:)

**Authorizing Signatory:** The person authorized to sign the application and contract for the energy efficiency audit; the person to be contacted for questions about the application and contracts.

**Project Manager:** The person to be contacted with questions regarding scheduling site visits and technical issues.

**Organization type:** Please check whether the organization is a Non-profit Organization or Private Enterprise. If Private Enterprise, check all that apply, and whether it is minority owned.

**D-U-N-S® Number:** DOE requires all applicants receiving ARRA funds to provide their Dun and Bradstreet Universal Numbering System number (DUNS). Visit [www.dnb.com](http://www.dnb.com) to obtain a D-U-N-S® Number. To register with the Central Contractor Registration visit [www.ccr.gov](http://www.ccr.gov).

**Federal Identification Number:** The federal tax identification number is necessary to receive the energy audit or other funding participation.

**Agreement for auditor's access to facility, data, and past relevant materials:** DEQ will contract with pre-qualified industrial energy consultant to complete energy audits at top ranked facilities. On-site access and energy data will be needed by the DEQ consultant to complete the industrial energy audits and recommend energy efficiency measures (EEMs) at the facility. Relevant energy audit reports and materials will be summarized below. A "Yes" response will identify agreement to the items listed, and that the facility will, to the best of their ability, schedule the consultant during a time of operation for sub-metering and monitoring of equipment and processes. A negative response, or subsequent inability to allow access may disqualify the facility from receiving an industrial energy audit.

## ATTACHMENT D

### EVALUATION CRITERIA

Application packages must contain a technical narrative that addresses the evaluation criteria described below. This is the information that the review team will use to select and rank facilities for audits. Applicants should follow the format below to provide the information requested. This section may not exceed 10- 8 1/2x11 pages, 12 point font. Each page should contain a header or footer with the RFA number, the facility name and the page number.

#### Evaluation Criteria:

- 1) Statement of Need (15 points maximum):** This section should include, but not be limited to the following:
  - Summarize the defining features and circumstances that make funding of this audit of special importance to this facility at this time.
  - Describe what makes this particular facility a good candidate for an energy efficiency audit.
  - Describe activities previously undertaken by the facility toward improving energy efficiency in the past five years
    - A description of efficiency or major retrofit measures implemented since the last energy audit or in the last five years.
    - If not previously implemented, describe possible resources needed to implement the measures.
  - Indicate how potential energy efficiency improvements, or the implementation of a biomass energy, combined heat and power, and/or waste-heat recovery system will affect current operations, the future of the facility, and the potential impact on the community.
- 2) Facility Description (15 points maximum):** Describe the primary wood products and lumber manufacturing facility where the energy audit will be conducted. The description is expected to include, at a minimum:
  - What product(s) are produced;
  - The number of employees and annual hours of operation.
  - A brief description of the age, size and condition of all the building(s), main processes, and energy equipment (e.g. boilers) to be audited. The heating and process energy system(s) and fuel(s) used;
  - Any planned renovations or retrofits, and whether they are processing or energy-related;
- 3) Technical Feasibility (45 points total maximum from A and B below):** This section should describe (A) the technical feasibility of a successful energy efficiency audit and (B) the facility's interest and potential to integrate or expand energy systems that employ woody biomass, combined heat and power, and/or waste heat recovery systems. This should include at a minimum:

- A. The Energy Efficiency Audit (20 points maximum).** Describe technical feasibility of a successfully executed energy efficiency audit.
- Fill out and attach Attachment B: Facility Energy and Fuel Consumption Summary Form.
  - Describe if staff and resources are available and accessible to work with the energy auditing firm to provide access to facility site and energy usage information.
  - Describe the facility management's commitment to identifying and implementing energy efficiency measures on-site.
  - Provide the earliest possible date that a consultant shall have access to the facility and energy data to begin the audit process. In some cases work must be completed by March 31, 2011.

- B. Integration of Biomass Energy, Combined Heat and Power and/or Waste Heat Recovery Systems (25 points maximum):** Discuss the facility's potential to integrate or expand energy systems that employ woody biomass, combined heat and power, and/or waste heat recovery systems, addressing each of the following points:

- Briefly describe actions taken, or planned, by the facility to integrate or expand:
  - the use of woody biomass energy for thermal, mechanical and/or electrical power production for use on-site or for export,
  - a combined heat and power system, and/or
  - the on-site recovery and use of industrial waste heat.
- Explain whether or not the facility has conducted a feasibility assessment of any of these technologies, the reported viability of developing those projects, and actions planned as a result of the assessment. Please include the cover page of such reports as an attachment to the application. Such pages will not be counted in the total page count for the Evaluation Criteria.
- Briefly explain the planned steps in development of these technologies at the facility site and describe major obstacles, if any, to their development.
- Describe volume of additional woody biomass estimated to be consumed annually (in bone dry tons) by the facility if biomass energy use is expanded as planned.
- Explain whether or not integration of a biomass-fired energy system would result in a reduction of on-site fossil fuel use.

- 4) Employment Created or Maintained (10 points maximum):** Please estimate the number of jobs created or maintained as a result of the energy efficiency audit, and/or implementation of potential energy efficiency measures. For example, federal OMB estimates of a single full-time-equivalent (FTE) for every \$18,000 spent in Stimulus Act projects. As a result of the OMB estimates, an audit costing \$36,000 would be estimated at 2 FTE.

**5) Matching Funds and/or In-kind contributions (15-points):** A minimum of 10-percent cash for the energy audit will be required. For example, if the energy consultant has bid \$36,000 to complete the energy audit. The facility would provide \$3,600 cash to the firm, and DEQ would pay the firm the remaining \$32,400. The facility may receive additional points in this section if they have additional match or in-kind contributions above and beyond the 10% cash minimum. In kind contributions could be systems (such as lighting, steam, compressed air, etc.) that have been evaluated in the past five years that would not need to be included in the current audit. Additional matching funds could be committed either by the facility or by a utility. A signed letter of commitment is required from each entity offering match to receive points in this section.

**ATTACHMENT E**  
**SAMPLE UTILITY RELEASE FORM**

January 11, 2011

Authorization of Release

←Insert Utility Representative  
←Insert Utility Representative Address  
←Insert Utility City, State and ZIP  
←Insert Utility Representative Email address  
←Insert Utility Representative phone number

Dear Mr. \_\_\_\_,                      ←Insert Utility Representative

On behalf of the (name of Primary Wood Products and Lumber Manufacturing Facility) , located in (Name of Town), Montana, I hereby authorize (individual utility provider)(Montana Rural Electric Cooperative, Montana Dakota Utilities, BPA, Northwestern Energy) to electronically release read-only account information for all \_\_\_\_\_(Insert account numbers) accounts to (the Energy Auditor assigned by the DEQ). We are contracting with the audit firm to help us track and assess our energy consumption. This collaboration will require submittal of both historical and future energy consumption data. The point of contact for data transfer is:

Energy Audit Firm  
ATTN: Auditor assigned  
Address  
Phone number  
Email address

Should you have any questions regarding this "Authorization of Release" letter please feel free to contact this office.

Sincerely,

## ATTACHMENT F

### SAMPLE LETTER OF COMMITMENT

(no page limit)

To: Brian Spangler  
Montana Department of Environmental Quality  
Energy and Pollution Prevention Bureau  
Business & Community Assistance Program  
POB 200901  
Helena, MT 59620-0901

From: (responsible official and entity providing the matching funds)  
Primary Wood Products and Lumber Manufacturing Facility Name (XXX)  
Address  
Location Name, Montana

Date: Month Day, 2011

Subject: Cash Match Commitment for Energy Efficiency Audit

Dear Sir:

Thank you for supporting our effort to increase production efficiency, reduce energy use, and partnering with us in the Primary Wood Products and Lumber Manufacturing Facility Energy Efficiency Audit project. XXX produces \_\_\_\_\_ and operates \_\_\_\_\_ (annual operating/shifts) in \_\_\_\_\_ (Location Name), Montana. \_\_\_\_\_ XXX accepts the Department of Environmental Quality (DEQ) Energy Efficiency Audit award.

\_\_\_\_\_XXX understands that DEQ will contract with the Energy Efficiency Consultant to complete the audit at our facility and that the consultant must access our energy use data, past efficiency related reports and materials, and our facility at \_\_\_\_\_ (location) Montana to complete the audit and necessary monitoring. We agree to present the final energy efficiency audit report and business plans to our \_\_\_\_\_ (board, corporate management, etc) for consideration and possible prioritization of energy efficiency measures and activities, and will report the results of the presentation to DEQ in a timely manner (before September 30, 2011).

\_\_\_\_\_XXX will provide a \_\_\_\_\_ (at least ten) percent cash match to fund this investment grade energy efficiency audit. We understand these audits can range from \$30,000 to no more than \$50,000, and that the results may qualify the facility for funding of energy efficiency measures from other sources, including our own utility. XXX understands that the award is not official or final until the ARRA energy efficiency audit agreement has been completed and signed by DEQ and the Contractor assigned to our audit.

Sincerely,

<Actual signature>

Responsible Official's Name and Title

\_\_\_\_XXX Primary wood products and lumber manufacturing Facility

## **ATTACHMENT G**

### **APPLICATION SUBMITTAL CHECKLIST**

- ☐ Completed and signed Energy Efficiency Audit Application Form (Attachment C)
- ☐ Completed and signed Letter of Commitment for cost-share match
- ☐ Completed Facility Energy and Fuel Consumption Summary Form (Attachment B)
- ☐ Evaluation Criteria (see Attachment D) addressed in a technical narrative not to exceed 10 pages. Each 8 ½ x 11 page should have the applicant's facility name, RFA number and a page number. Font is to be no smaller than 12-point.
- ☐ Additional pages to application may include letters of support, and/or copies of title pages from any previous energy audits, efficiency upgrades, feasibility studies, or facility improvement plans for point consideration in Evaluation Criteria. Each additional page should have the applicant's facility name and RFA number (on header or footer).

### **FOR MORE INFORMATION CONTACT:**

Vicki Woodrow

Phone: 406-444-3101

Email: [vwoodrow@mt.gov](mailto:vwoodrow@mt.gov)